

## TWO NEW CHAOBORIDAE FROM THE UNITED STATES

(DIPTERA)

ALAN STONE, *Entomology Research Division ARS,*  
*U. S. Department of Agriculture, Washington, D. C.*

There recently came to my notice, in the collection of the United States National Museum, two apparently new species of the family Chaoboridae. One represents a genus new to the United States; the other might be confused with two species, widespread in this country, which are sympatric with it.

**Lutzomiops** Lane 1942**Lutzomiops kerrvillensis**, n. sp.

Female: Length 1.6 mm.; wing 1.52 mm. General coloration yellowish brown; hairs concolorous; head, three slender central lines and the vertical sides of the mesonotum, a spot on upper postpronotum, and a stripe from base of fore coxa across pleuron to just below base of halter subshining darker brown, the rest of mesonotum thinly paler pollinose, and the humeral area distinctly paler, but the scutal pattern not very distinct; scutellum yellowish; wings and legs unpatterned, the vestiture uniformly pale brown; stem of halter white, knob pale yellowish. Abdomen unbanded, the venter paler than dorsum. Ratio of palpal segments, 2: 3.5: 13: 7: 12; segment 3 with distal half swollen with a broad ventral depression near apex. Apex of Rs slightly beyond base of first fork cell. Ratio of hind tarsomeres, 10: 4.2: 4: 2.6: 1.8. A single sclerotized, subspherical spermatheca 0.05 mm. in diameter, with very short neck.

Holotype female, Kerrville, Texas, V.1954, L. J. Bottimer; paratypes, 4 ♀, same place and collector, 28.VIII.53, V.54, and 21.V.54. (USNM No. 67423).

This species resembles *L. iridescens* (Lane) 1942 and *L. manaosensis* Lane 1958, but it differs from both of these in having the knob of the halter entirely pale, not blackened. Other species have either a banded abdomen, distinctly stronger scutal pattern, or the ends of the femora with silvery scales. This is the first species of this neotropical genus reported from the United States.

Genus **Chaoborus** Lichtenstein 1800Subgenus **Sayomyia** Coquillett 1903**Chaoborus (Sayomyia) maculipes**, n. sp.

Female: Wing length 2 mm.; fore tibia 1.03 mm.; mid tibia 0.69 mm.; hind tibia 0.85 mm. Generally yellowish white. Antenna pale, the last two segments darkened basally; palpus dark, the first three segments with pale basal bands; dark pale with some darkening at sides behind eyes; pronotal lobe dark brown; postpronotum with a central dark brown area; scutal pattern pale yellow brown, consisting of a median stripe narrowed behind and not quite reaching level of wing bases, and a lateral stripe above each wing base; no dark spotting between these stripes; scutellum entirely pale; pleura with some small irregular dark

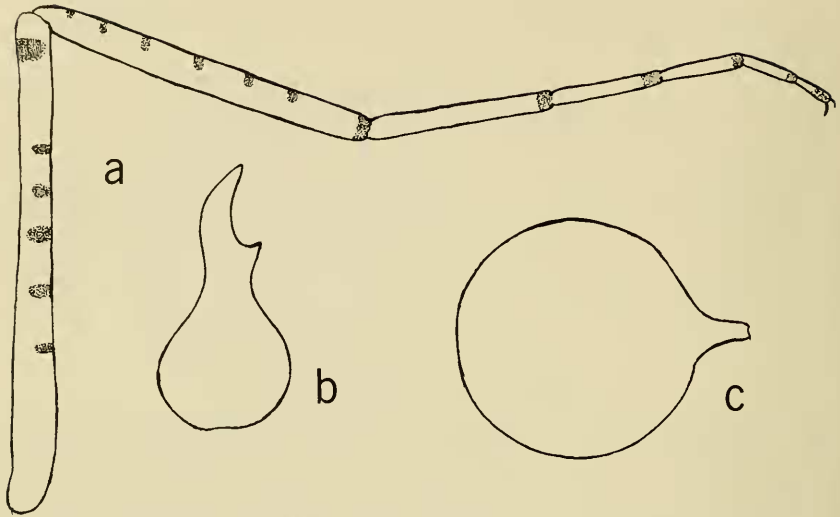


Fig. 1. *Chaoborus maculipes* n. sp. (a). Hind leg, anterior view (holotype); (b). penis valve (Baton Rouge paratype); (c). spermatheca (paratype).

marks. Wing pattern pale yellow brown, consisting of spots at base of  $R_s$ , apex of subcosta and  $R_1$ , base of each fork cell, margins of cross veins from base of  $R_3$  to base of  $Cu_2$ , middle of vein  $Cu$ , and faintly at apices of all veins from  $R_2$  to A. Halteres nearly white. Legs (fig. 1a) nearly white, each femur and tibia with dark brown spots usually not crossing segments; 7 on fore tibia, 5 or 6 on other femora and tibiae; hind femur with a large apical spot; tarsomeres of all legs with narrow apical dark bands. Abdomen yellow, the sides of all terga with many of the setal bases darkened. Spermatheca 3, dark, spherical, 0.06 mm. in diameter, each with stem about one-fifth as long as diameter of spermatheca (fig. 1c).

Male: Essentially same as female except for usual sexual differences; flagellar nodes darkened. Genitalia with apical half of each basimere darkened; distimere about 0.71 length of basimere; basimere with no subapical lobe or enlarged setae; penis valve curved with a subbasal tooth (fig. 1b).

Holotype female, Hot Springs National Park, Arkansas, 28.IX.63, B. C. Marshall collector; paratypes, 4 ♀♀, 1 ♂, same locality and collector, 16.IX.63, 28.IX.63, and 18.X.63; 4 ♂♂, Baton Rouge, Louisiana, IV.47 and 23.IV.57, light trap, W. W. Wirth collector. (USNM, No. 67424).

This species resembles *C. punctipennis* (Say) in wing pattern and spotting of legs although the spots are few and smaller; it resembles *C. albatus* Johnson in lacking dark spots between the scutal stripes, but *albatus* also lacks the leg spots and usually the dark setal spots on the sides of the abdomen. The dark spots of the legs are much stronger in *maculipes* than in the western *astictopus* Dyar and Knab,

and the wing pattern is very different from *annulatus* Cook from Florida and Georgia.

*Chaoborus albatus* has been found from Minnesota to Quebec and Massachusetts south to Louisiana and Georgia, and also in Washington. *C. punctipennis* is found in southeastern Canada and probably throughout the United States. These two species and *maculipes* were collected at the same time in light traps in Baton Rouge.

---

### THE IDENTITY OF COLPOCEPHALUM HOFFMANNI ZAVALETA (MALLOPHAGA: MENOPONIDAE)

In a study of the *Colpocephalum* of the Galliformes (Price and Beer, 1964, Ann. Ent. Soc. Amer. 57: 391-402), *C. hoffmanni* was included as a *species sedis incertae* due to its reported type-host, *Oreophasis derbianus* G. R. Gray (Galliformes: Cracidae). Its described morphology was suspiciously divergent from the other galliform *Colpocephalum*, but no other action could then be taken without available specimens. Recently, however, through the courtesy of Dr. Leonila Vazquez, University of Mexico, I received a ♀ and 2 ♂♂ of Zavaleta's type-series of *C. hoffmanni* and placement of this species is now possible.

These specimens are morphologically closest to *Colpocephalum fregili* Denny of the Corvidae (Passeriformes) (see Price and Beer, 1965, Proc. Ent. Soc. Wash. 67: 7-14), agreeing in all features but the following: (1) margin of metanotum with 1 long, 4-7 short setae on each side, with median third devoid of setae; (2) ♀ without any anterior abdominal tergal setae; (3) each end of ventral anal fringe of ♀ with 4 conspicuously longer and heavier setae over twice length of adjacent setae; (4) ♂ with 1-9 anterior abdominal tergal setae on each of I-VIII, all setae very short, separated by at least own length from posterior margin of tergite; and (5) last tergite of ♂ same width but longer, 0.15-0.16 mm long vs. 0.11-0.14 ( $\bar{X} = 0.12$ ) mm for *C. fregili*.

Zavaleta (1944, An. Inst. Biol. Mex. 15: 193-211) associates *Colpocephalum hoffmanni* with *O. derbianus* collected on 4 June 1943 (slide available to me indicates Chiapas as locality). In the same paper, she includes *Degeeriella illustris* (Kellogg), *Docophorus incisus* Kellogg, and *Menopon distinctum* Kellogg and Chapman for specimens supposedly from the corvid, *Calocitta formosa azurea* Nelson (Chiapas, 4 June 1943 for the first 2, and only June 1943 for the last). *Myrsidea chiapensis* Zavaleta is described from *O. derbianus* (Chiapas, June 1943) and *C. formosa azurea* (Chiapas, April 1942), the first host being in error. Therefore, it seems most likely that *Colpocephalum hoffmanni* is represented by specimens incorrectly ascribed to *O. derbianus*. The true host is postulated to be a corvid, perhaps *Calocitta formosa*, and *C. hoffmanni* should be considered as a recognizable species within the corvid *Colpocephalum*.—ROGER D. PRICE, Department of Entomology, Fisheries, and Wildlife, University of Minnesota, St. Paul, Minnesota 55101.